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| APPLICATION NO.  | FILING DATE                | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------------------|-----------------------|---------------------|------------------|
| 10/517,834   | 07/20/2005                 | Andrew G.L. Blackwood | 041618-77           | 8811             |
| 22204<br>NIXON PEABO   | 7590 05/11/200<br>ODY, LLP | EXAMINER              |                     |                  |
| 401 9TH STREET, NW<br>SUITE 900<br>WASHINGTON, DC 20004-2128 |                            |                       | RASHID, MAHBUBUR    |                  |
|  |                            |                       | ART UNIT            | PAPER NUMBER     |
|  |                            |                       | 3657                |                  |
|  |                            |                       |                     |                  |
|  |                            |                       | MAIL DATE           | DELIVERY MODE    |
|  |                            |                       | 05/11/2009          | PAPER            |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.  | Applicant(s)   |  |  |
|---|--|--|--|--|
|   | 10/517,834   | BLACKWOOD ET AL.   |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |
|   | MAHBUBUR RASHID  | 3657   |  |  |
| The MAILING DATE of this communicati Period for Reply   | on appears on the cover sheet wi   | th the correspondence address  |  |  |
| A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAIL.  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica  - If NO period for reply is specified above, the maximum statutor.  - Failure to reply within the set or extended period for reply will, be Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).   | NG DATE OF THIS COMMUNIC<br>CFR 1.136(a). In no event, however, may a retion.<br>y period will apply and will expire SIX (6) MON<br>by statute, cause the application to become AB | CATION.  eply be timely filed  THS from the mailing date of this communication.  EANDONED (35 U.S.C. § 133). |  |  |
| Status  |  |  |  |  |
| Responsive to communication(s) filed or     Za)    This action is <b>FINAL</b> .    2b)   | This action is non-final.  |  |  |  |
| Disposition of Claims   |  |  |  |  |
| 4)  Claim(s) 1,3-10 and 12 is/are pending in 4a) Of the above claim(s) is/are w 5)  Claim(s) is/are allowed. 6)  Claim(s) 1, 3-10 and 12 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction  | rithdrawn from consideration.  |  |  |  |
| Application Papers  |  |  |  |  |
| 9) The specification is objected to by the Ex 10) The drawing(s) filed on is/are: a)[ Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by   | accepted or b) objected to to the drawing(s) be held in abeyan correction is required if the drawing(  | ce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).   |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-93) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date  | 948) Paper No(s  | Summary (PTO-413)<br>s)/Mail Date<br>nformal Patent Application<br>  |  |  |

#### **DETAILED ACTION**

## Response to Amendment

Claim 1 is amended.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck et al. (WO 01/17834) in view of Cramer et al. (US 5,027,529)(please note that the US patent 5,027,529 is the English equivalent of the Beck reference is used in this office action).

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Regarding claim 1, 10 and 12, Beck discloses a vehicle air supply system (fig. 2) having a compressor (12), an air dryer (14), a reservoir (18) adapted to receive air from the compressor via the air dryer and control means (20) operable to cause standard regeneration of the air dryer when a predetermined system condition is met (abstract), the control means also being operable to cause an intermediate regeneration of the air dryer in advance of the predetermined system condition being met (see col. 2, lines 14-23) if said system condition is not met with in a predetermined time period, wherein the control means includes a governor adapted to cause the standard regeneration and a governor bypass adapted to cause the intermediate regeneration (col. 2, lines 24-27).

Beck discloses all claimed limitations as set forth above but fails to disclose a control means also selectively cause and inhibit the regeneration depending upon air supply requirements as claimed. However, Cramer discloses a compressed air system where a control unit enabling and disabling of the in response to pressure level variations in the system and it also responds to compressor disabling by causing the system air dryer to regenerate or purge for a predetermined time period (please see the abstract; figs. 1-2; see also col. 1, lines 18-23, lines 35-40, col. 1, line 64 to col. 2, line 9, col. 2, lines 13-17, col. 4, lines 7-18, col. 4, line 61 to col. 5, line 9 and col. 6, lines 11-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide such control means taught by Cramer in the system of Beck in order to assure that the purge valve will not remain open longer than necessary to regenerate the desiccant, and also assures that the air dryer is purged at regular

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intervals, provided that the pressure level in the reservoir remains above a minimum safe pressure level, thus making the system more reliable.

Re-claim 3, please see col. 1, lines 58-60 of Beck '463.

Re-claim 4, please see col. 1, lines 60-63 of Beck '463.

Re-claim 5, please see col. 1, line 63 of Beck '463.

Re-claim 6, please see col. 2, lines 1-3 of Beck '463.

**Re-claim 7**, please see col. 2, lines 3-6 of Beck '463.

**Re-claim 8**, please see col. 2, line 6 of Beck '463.

Re-claim 9, please see col. 2, lines 9-10 of Beck '463.

### Response to Arguments

Applicant's arguments filed 02/23/2008 have been fully considered but they are not persuasive.

Regarding the remarks, the applicant argues that neither Beck nor Cramer, either taken alone or in combination, anticipates or render obvious all of the features recited in independent claim 1. The examiner disagrees and likes to point out that it has been held that the recitations such as "adapted to", "to prevent" and "to cause" with respect to the manner in which claimed apparatuses are intended to be employed do not differentiate the claimed apparatuses from the prior art apparatuses satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). The applicant does not directly disclose the prevention of the commencement of the purge cycle by the control means. The combination of the references Beck and Cramer clearly

discloses all claimed structures including a control means as set forth above are certainly capable of preventing such commencement of the purge cycle.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHBUBUR RASHID whose telephone number is (571)272-7218. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R./ Examiner, Art Unit 3657 /Robert A. Siconolfi/ Supervisory Patent Examiner, Art Unit 3657